CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM
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R043 California Legless Lizard Anniella pulchra
Family: Anniellidae Order: Squamata Class: Reptilia

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

This secretive fossorial lizard is common in suitable habitats in the Coast Ranges from the vicinity of Antioch, Contra Costa Co. south to the Mexican border (Jennings and Hayes 1994). Legless lizards are of spotty occurrence throughout the rest of their range, which includes the floor of the San Joaquin Valley from San Joaquin Co. south, the west slope of the southern Sierra, the Tehachapi Mountains west of the desert, and the mountains of southern California. An isolated desert population is known from Whitewater, Riverside Co. Elevation is from near sea level to about 1800 m (6000 ft) in the Sierra. Common in several habitats but especially in coastal dune, valley-foothill, chaparral, and coastal scrub types.

SPECIFIC HABITAT REQUIREMENTS

Feeding: This lizard usually forages at the base of shrubs or other vegetation either on the surface or just below it in leaf litter or sandy soil. Legless lizards eat insect larvae, small adult insects, and spiders (Stebbins 1954).

Cover: Legless lizards sometimes seek cover under surface objects such as flat boards and rocks where they lie barely covered in loose soil. They are often encountered buried in leaf litter and commonly burrow near the surface through loose soil.

Reproduction: Little is known about specific habitat requirements for courtship and breeding. Live young are born in the fall.

Water: Little information on water requirements. Legless lizards are often found where substrates are slightly moist. Miller (1944) reported that moisture is an essential habitat requirement.

Pattern: Found primarily in areas with sandy or loose organic soils or where there is plenty of leaf litter.

SPECIES LIFE HISTORY

Activity Patterns: Legless lizards have a relatively low thermal preference (Bury and Balgooyen 1976), which allows them to be active on cool days as well as early in the morning and even at night during warmer periods, at which time mid-day activity is reduced. Individuals from coastal and southern localities are probably active all year with only brief periods of winter inactivity. Lizards from more inland sites, especially in the Sierra foothills, undergo winter hibernation.

Seasonal Movements/Migration: Predictable seasonal movements have not been reported for ths species in California. Presumably all habitat requirements are met within the normal area of activity.

Home Range: No data, but likely quite restricted. Have demonstrated high site fidelity over the short term (Jennings and Hayes 1994). Some long distance wandering related to temporarily available food resources may occur. Attain high densities where habitat is suitable.

Territory: No evidence for the territorial defense of resources has been reported.

Reproduction: The reproductive season begins with mating activities in late spring or early summer. The gestation period is about 4 months (Jennings and Hayes 1994). Live young are born in September, October, or even November. Litter size ranges from one to four but two is common (Stebbins 1954).

Niche: This secretive and little known lizard may occasionally be taken as prey by alligator lizard, snakes, birds, and small mammals. Competition for food, space, or other resources with most lizards with which it coexists is probably minimal because of the low thermal tolerances and preference for moist substrates exhibited by legless lizards. The diet of legless lizards probably overlaps to some extent with that of juvenile alligator lizards, skinks, and perhaps some salamanders.

Comments: The status of the black legless lizard (A. p. nigra) is under review by the U.S. Fish and Wildlife Service. Recent arguments have suggested a specific change to Anniella nigra (Hunt 1983).

REFERENCES

Bury, R. B., and T. G. Balgooyen. 1976. Temperature selectivity in the legless lizard, anniella pulchra. Copeia 1976:152-155.

Hunt, L. E. 1983. A nomenclatural rearrangement of the genus anniella (Sauria: Anniellidae). Copeia 1983:79-89.

Jennings, M. R. and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Department of Fish and Game. Rancho Cordova 255 pp.

Miller, C. M. 1944. Ecologic relations and adaptations of the limbless lizards of the genus anniella. Ecol. Monogr. 14:271-289.

Stebbins, R. C. 1954. Amphibians and reptiles of western North America. McGraw-Hill, New York. 536pp.